PRELIMINARY

ENVIRONMENTAL ASSESSMENT

NV-040-04-012

Mining Plan of Operations
N76783

Jim Wilkin Trucking LLC

Wilson Creek Perlite Mine

LOCATION: WILSON CREEK RANGE
LINCOLN COUNTY, NEVADA

PREPARED BY

BUREAU OF LAND MANAGEMENT
ELY FIELD OFFICE

AUTHOR

William R. Wilson

December 2003

I. BACKGROUND INFORMATION

Introduction

On February 18, 2003, Jim Wilkin Trucking submitted a Plan of Operations to mine perlite from an existing perlite prospect located in Section 18, T. 03 N., R. 68 E., MDBM. Revisions were received on March 10, 2003, and April 1, 2003. The project area is located along the east side of Lake Valley about 13 miles northeast of Pioche, Lincoln County, Nevada (Figure 1). The proposed mine is approximately 1,000 feet southwest of the Parsnip Peak Wilderness Study Area boundary on the west side of the Wilson Creek Range. The proposed project area, had been stripped of vegetation and prepared for production many years ago, probably in the 1950's or 1960's, but was never put into operation.

An on-site visit was held on March 21, 2003, with Jim and Uvada Wilkin and BLM personnel Lisa Gilbert, Marty Bush, Karen Prentice, and Bill Wilson. A follow-up visit was made by Jeff Brower and Bill Wilson on April 4, 2003.

Lincoln County has been Nevada's leader in perlite production since 1948. Perlite occurs along the hydrated edges of glassy rhyolite flows and shallow intrusions. It is a naturally occurring, inert volcanic rock, similar in composition to granite. Perlite derives its value from its physical property, that when heated, it expands or "pops" to several times its original volume to produce a lightweight material with several uses in agricultural and industrial applications. Jim Wilkin Trucking has produced perlite from several deposits in Lincoln County and operates a perlite mill ("popping plant") near Caliente, Nevada.

Need for the Proposal

The need is for a private corporation to seek an economic use of the public lands by mining perlite under appropriate Federal regulations in the attempt to help meet the demand for perlite in the United States.

Relationship to Planning

The Proposed Action is in conformance with the Schell Resource Area Decision Summary and Record of Decision (1983) for the Schell Management Framework Plan. The Decision states "Keep the Resource Area open to exploration, leasing and development of the mineral resources except as provided by legislative action or policy. There is an increasing demand for minerals by our nation and it is important to deep as much of the public land open to exploration and development as possible."

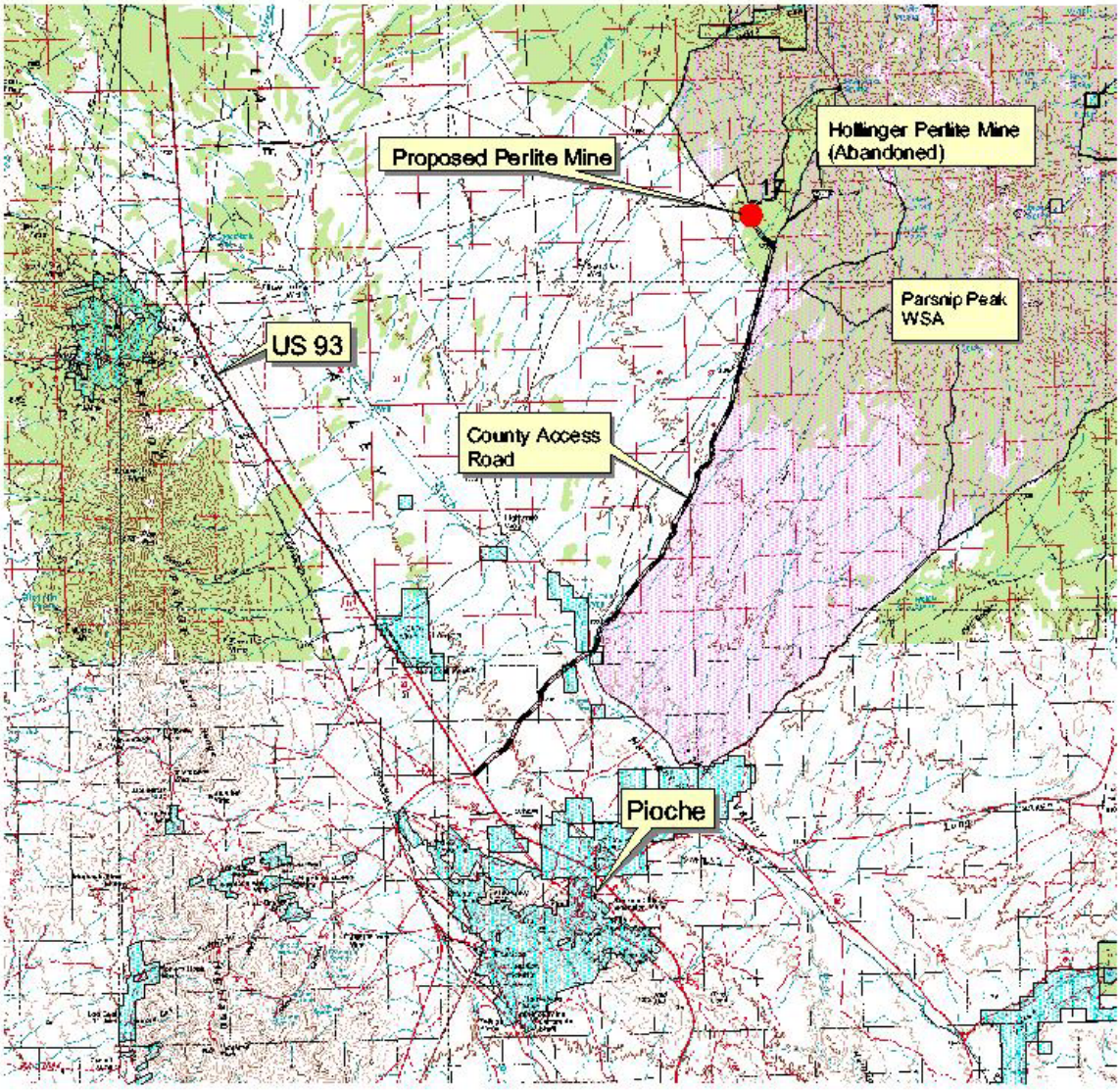
The Lincoln County Public Land & Natural Resource Management Plan (November 19, 1997) states (p.15) that "…it is the policy of Lincoln County to encourage mineral exploration and development consistent with custom and culture and to eliminate unreasonable barriers to such exploration and development…".

T03N R68E Section 17

Mount Wilson SW
7.5' Quadrangle

Figure 1. Location Map
Wilson Creek Perlite Project
Jim Wilkin Trucking LLC

Bureau of Land Management
Ely District



2 0 2 4 Miles

N

Parsnip Peak WSA

Private

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data.

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Issues

No issues were identified during internal scoping in relationship to the proposed perlite operation.

II. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

Proposed Action

Jim Wilkin Trucking proposes to mine perlite from a deposit located in T 3 N, R 68 E section 17, approximately 13 miles northeast of Pioche, Lincoln County, Nevada (Figure 1). The mine area was readied for production many years ago by an unknown previous operator and is the footprint for the proposed operation (Figure 2). Vegetation and overburden were stripped off of the mine area and piled up around the perimeter of the proposed pit where it is now available for reclamation. An access road was constructed.

Summary of Project Disturbance

Upgrade Existing Access Road	**1200 ft x 16 ft**	**0.5**
Existing Stripped Mine Area	**200 ft x 300 ft**	**1.6**
Process Area	**150 ft x 300 ft**	**1.1**
Total Disturbance		**3.2 acres**

The operation would consist of mining the perlite, crushing, screening, stockpiling, and hauling the material to Caliente. Mining, processing, and hauling would take place during 2 to 3 months a year in the fall. Additional hauling would take place intermittently throughout the year, at a rate of 100 to 200 tons per week, in response to demand for the product. Total yearly production is estimated between 5,000 to 10,000 tons. Mining operations would commence in early 2004, depending on weather and market factors, and are expected to continue for several years. Interim stabilization and reclamation would occur concurrently with site preparation and operations. Final reclamation would be completed during final closure. The operator would follow the "Recommended Operating Procedures for Exploration/Mining Activities in the Ely District, December 2002" (Attachment 1).

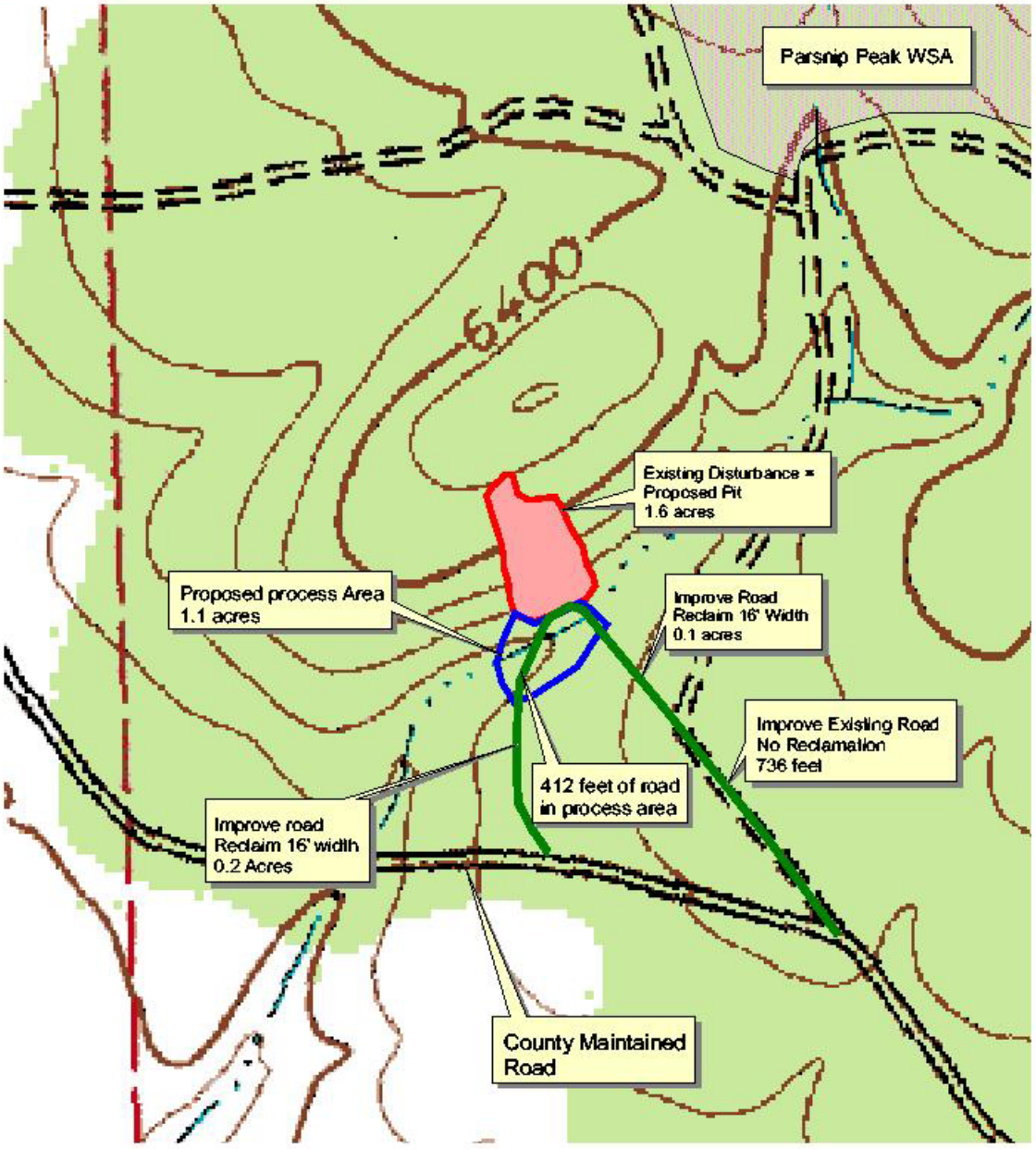
The proposed plan is to drill and blast the exposed perlite once a year, load, haul, and dump the material into a jaw crusher using a front end loader. Mobile equipment would consist of a D9 Cat Dozer and three Cat Loaders. Mining would create a quarry with a pit wall as high as 40 feet. Crushing and screening would follow the flow diagram of Figure 3 to produce stockpiles of two different size fractions. The reject material would be returned to the pit to backfill areas as they are mined out.

The finished material would be hauled out with tarp-enclosed, highway-legal, 40-ton capacity truck and trailer setups to the railhead in Caliente. At an annual production rate of 10,000 tons per year, there would be a total of approximately 250 round trips per year between the mine and the railhead in Caliente.

Figure 2. Site Layout and Reclamation Needs

Wilson Creek Perlite Project
Jim Wilkin Trucking LLC

Bureau of Land Management
Ely District



T03N R68E Section 17
Mount Wilson SW 7.5' Quadrangle

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Existing Roads and Access

The project site can be reached from Pioche, Nevada, by proceeding northward on US Highway 93 for approximately 3 miles, then northeastward for 12 miles on the Mt. Wilson Road (Lincoln County 432) which is maintained by Lincoln County. At the road intersection, proceed along the County road, the north (left) fork, another 0.5 miles to the project area. The right fork continues on to the Hollinger Perlite mine where it was used as the main haulage road from the mine back to US 93.

Roads within the project area (Figure 2) consist of an existing 2-track and approximately 1,800 feet of access road for the old attempted mine operation. Both roads had been improved to a width of approximately 12 feet to accommodate the anticipated truck haulage. A culvert had been installed where the existing access road looped across the drainage between the proposed mine and process areas. Under the proposed action, these would be widened to 16 feet to accommodate the larger haul trucks and trailers.

Process Site

The process facilities would be located on a 1.1 acre site located south of the pit and spans a gully that separates it from the pit area. Access across the drainage would be by a low water crossing. The U S Army Corps of Engineers has determined that it is not subject to regulation of Section 404 of the Clean Water Act. The process site would be brushed with a dozer and the pinyon/juniper trees and stockpiled near the County road for possible disposal as firewood. Portions of the site may be graveled with crushed material for dust control and operational efficiency.

There are no structures on the site. An ore storage building may be erected within the next two years, depending on production needs and scheduling. Portable toilets and trash containers would be brought onto site during periods of mining and crushing operations. All trash and other debris, not originating on site, would be hauled to a proper disposal facility.

Temporary Shutdowns

During periods of non-operation the site would be cleared of any fuel, lubricants, or other potentially harmful material. For public safety, the site would be secured by any combination of two of the following: fencing, sloping to 2:1 (horizontal:vertical), berming, and signing.

Reclamation

Reclamation requirements are shown on Figure 2.

Process site reclamation would begin concurrently with construction activities. All topsoil removed during site construction would be stockpiled and immediately seeded with the interim seed mixture shown in Attachment 2. Upon completion of operations, any cuts would be filled in and the ground recontoured to its original shape. Stockpiled topsoil would be evenly spread back over the disturbed areas. Compacted soils or graveled areas within the disturbed areas would be ripped, broken up by disking, or prepared by any other generally accepted method so

that the disturbed areas would be covered with soils broken up into a fine-grained seedbed. Seed from the recommended seed mix (Attachment 3) would be planted on contour with a drill seeder or broadcast technique during the recommended seeding period of October 1 to March 15. The target for successful reclamation would be 20% canopy cover of perennial vegetation as has been determined from existing soil and vegetative surveys in the general area. Should this standard not be met following the initial seeding, the BLM and the operator would meet to decide on the best course of actions necessary to meet the reclamation goals.

Pit reclamation would occur throughout the life of the mine. Reject material would be hauled back into mined out portions of the pit during mining and crushing operations. Highwalls would be cut down to 2:1 slopes in areas where mining has been completed. Upon completion of all mining, any remaining reject stockpiles or other waste rock would be pushed back into the pit. The entire pit area would be regraded to a 2:1 slope to approximate the pre-mining shape. The topsoil and overburden stockpiled around the pit by the previous operator would be spread back over the pit and seeded using the same procedure and seed mixture as for the process area.

The 1,200 feet of access road beyond the existing 2-track would be similarly ripped and seeded. Any culverts would be removed and any diversion ditches would be regraded and seeded.

Any ore storage facilities, equipment, and materials brought onto site would be removed.

Jim Wilkin Trucking would post a reclamation bond, as required under 43 CFR 3809, with the Nevada BLM State Office.

Noxious Weed Prevention

Jim Wilkin Trucking would implement the BLM's policy on the prevention and control of noxious weeds. Prior to entering the site, all construction, drilling equipment, and vehicles would be washed and cleaned to prevent the importation of noxious weed seeds from prior places of work. Vehicles would stay on designated roads and avoid driving through any weed patches. All seeds used in reclamation would be certified weed-free. Jim Wilkin Trucking would monitor for and control noxious weeds during the life of the project, until revegetation is successful. Guidelines for successful revegetation do not allow the presence of noxious weeds.

Monitoring

Monitoring needed to assess reclamation success and continuing environmental stewardship would consist of periodic compliance inspections of the area during the life of the mine operation by an authorized officer of the BLM. This monitoring would consist of checks on initial location of facilities, conformance to the Plan of Operations and Standard Operating Procedures, and the status of any reclamation. Post-mining compliance inspections would document conformance with the proposed action, completion of earthwork, and monitoring for noxious weeds, and vegetative success.

Alternatives

Alternatives Considered But Eliminated From Detailed Analysis

Jim Wilkin Trucking had previously submitted a plan to re-open and expand the old Hollinger Perlite Pit, located about one mile east of the proposed Wilson Creek Perlite Mine, but was denied authorization because portions of the operation would have been within the boundaries of the Parsnip Peak Wilderness Study Area (WSA).

A proposal to fill in the gully to provide a larger, level process area was considered but rejected due to concerns over erosion and flooding.

The No Action Alternative

The no alternative action is being analyzed in this EA in order to provide a baseline for comparison.

Other Alternatives

No other alternatives are necessary to respond to unresolved issues concerning alternative uses of available resources.

III. DESCRIPTION OF THE AFFECTED ENVIRONMENT WITH THE ASSOCIATED ENVIRONMENTAL CONSEQUENCES

Resources Not Present or Affected by the Proposed Action

There would be no impacts to floodplains, wetlands and riparian areas; Special Status Species (Federally Listed, Threatened or Endangered Species, Species Proposed For Federal Listing, State Protected or Otherwise Sensitive Species); migratory birds; areas of critical environmental concern; wild and scenic rivers; prime or unique farmlands; cultural, paleontological and historical resource values; floodplains, wetlands, and riparian; water quality (drinking/ground); wastes, hazardous and solid; wild horses and burros; Native American religious concerns; or environmental justice.

Ely BLM archeologists conducted a class III cultural survey over the access route, process area and mine site on March 21 and April 4, 2003. The survey found no cultural, paleontological or historical resource values; therefore the proposed action would have “no effect” on cultural, paleontological and historical resources.

Socio-Economic

Affected Environment

Lincoln County is sparsely populated. With the recent decline in metal mining, employment has shifted to government services, tourism, and agriculture.

Environmental Consequences

Proposed Action

The proposed action would provide an opportunity for a private, local company to make an economic use of the public lands and provide the local community with long-term employment opportunities.

No Action Alternative

The local community would be deprived of potential future employment opportunities. This economic use of the public lands would not occur.

Soils and Vegetation

Affected Environment

The photos in Figure 3 show the existing topography and vegetation of the project site. The soils are silty gravels derived from erosion of the adjacent volcanic and limestone terrain. Native vegetation mainly consists of pinyon, juniper, mountain big sage, various perennial grasses and annual/perennial forbs. Rainfall averages 14-16 inches per year. The mine area, which was stripped of soil and vegetation, supports a few juniper trees, sage, and some grasses, but not at the density of the undisturbed hillside. The old access road supports little vegetation on the cut areas, and abundant sage in the fill areas.

Environmental Consequences

Proposed Action

There would be a loss of as much as 3.2 acres of vegetation for livestock, wild horses, and wildlife during the life of the mine and for approximately 2 years while vegetation is being reestablished. The 1.1 acre process area of formerly pinyon/juniper trees would be seeded with perennial grasses and forbs. The reclamation measures of the proposed action would seek to minimize the long-term impacts to vegetation.

No Action Alternative

Because the mine area had been stripped by a previous operator, that 1.6 acres of disturbance would not be reclaimed under the no action alternative. Natural revegetation is occurring, but without the topsoil cover (now stockpiled), regrowth has not matched that of the undisturbed hillside. Impacts associated with the new disturbance for the process site and access road improvements, as described above, would not occur.

Figure 3. Photos of Wilson Creek Perlite Project Area

View of Wilson Creek Range from US 93 looking northeast. Hollinger Perlite Mine (abandoned) in far center. Proposed Wilson Creek Perlite mine is the small scrape at the base of the range, far left, approximately 1 mile left of the Hollinger Pit.

Proposed Wilson Creek Perlite mine site, looking north down the old access road. Pit was scraped back in the 1960's or 1970's but was never put into production.

View of process site area from the proposed pit, looking south. The old access road runs down the slope on the left edge of the photo, then loops down the drainage, to the right, then back to the county road.

Invasive, Non Native Species (Including Noxious Weeds)

Affected Environment

Noxious weeds, those specifically listed by the State of Nevada, are shown in Attachment 4. A noxious weed risk assessment was completed for this project (Attachment 5). The overall risk was calculated as low, based on BLM Manual 9015. No noxious weeds or invasive species were found on site during pre-site inspections of March 21 and April 4, 2003. Dalmatian Toadflax, Bull Thistle, and Spotted Knapweed have been previously inventoried in the region.

Environmental Consequences

Proposed Action

There are two categories of weeds as defined by the BLM. One is invasive, non native weeds. The other is noxious weeds. Noxious weeds are defined on a State weed list as those species that are undesirable, introduced species for which aggressive control methods may stop their establishment in a given area. A zero tolerance policy for these weeds is in effect for project

disturbances such as this mine site. This class of weeds, (the noxious weeds) is the class of weed that was not found on site during the March 21, and April 4 site visits. The invasive non-native weeds are introduced species such as halogeton, tumbleweed, certain mustards, and other species that are so prevalent and opportunistic within the region that it is no longer practical or possible to expect a zero tolerance policy for these species. Newly disturbed areas almost always will have some of these introduced weed species show up with the initial seeding because these weed seeds are already in the soil on site or nearby. Seed mixes are designed to be competitive with these species, and usually, over time, the longer lived perennial natives will out-compete the opportunistic annual weeds. The goal of the reclamation objectives is to match the perennial cover of the reclaimed area with that of the undisturbed area.

The project area would be exposed to potential invasive and noxious weeds as a result of development and production activities. The susceptibility to weeds would remain throughout the life of the project including the reclamation period. Once the vegetative cover at the site has been restored, the risk of weed establishment would diminish to approximately pre-development levels. Cleansing equipment and using weed free seed would mitigate these risks. The prevention, monitoring, and eradication measures incorporated in the proposed action are adequate to mitigate any potential noxious weeds invasion.

No Action Alternative

Under the no action alternative, impacts as described above would not occur.

Visual Resources Management (VRM)

Affected Environment

The proposed project is located within a remote, uninhabited, portion of Lincoln County classified as Visual Resource Management (VRM) Class IV zone. The objective for the class IV zone is to allow change, even dominant change, but to mitigate the change as well as possible. A Class I zone is located with the Parsnip Peak WSA approximately 1,000 feet northeast of the project area. It also extends along the south side of the County access road for approximately eight miles.

Remnants of the 1.6 acres previously stripped for mining are somewhat visible across Lake Valley from US 93 and distinctly visible from the west facing slopes of the Parsnip Peak WSA east of the mine site.

Environmental Consequences

Proposed Action

Clearing of the process site and access roads would add another 1.6 acres of visual contrast. The contrasting visual effects of vegetation removal and reclamation would be noticeable until such time that the climax vegetation was sufficiently re-established to blend in with the surrounding undisturbed areas. Dust from operations and vehicle traffic would be visible during periods of

production and hauling. Although the area may experience short-term visual disturbances, the reclamation measures within the proposed action would adequately minimize the short-term and long-term effects.

No Action Alternative

Under the no action alternative, the previously stripped 1.6 acre mine area would remain visible for many years. Impacts associated with the proposed disturbance for the process site and access road improvements, as described above, would not occur.

Wilderness

Affected Environment

The proposed mine site is located within 1,000 feet of the Parsnip Peak WSA. The County access road from US 93 to the project site is adjacent to the northern boundary of the WSA for a distance of eight miles.

Environmental Consequences

Proposed Action

There would be an increase in traffic, to and from the project site, with accompanying dust and sound. No traffic would be expected to enter the WSA.

No Action Alternative

Under the no action alternative, the previously stripped 1.6 acre mine area would remain visible for many years. An increase in traffic due to mine operations would not occur.

Wild Horses and Burros

Affected Environment

The project area is within the Wilson Creek Horse Management Area (HMA).

Environmental Consequences

Proposed Action

The temporary loss of 3.2 acres of vegetation would have little impact on any wild horses that may stray into the area.

No Action Alternative

Under the no action alternative, the previously stripped 1.6 acre mine area would remain largely

unproductive for many years. Impacts associated with the proposed disturbance for the process site and access road improvements, as described above, would not occur.

Wildlife

Affected Environment

The project area is within yearlong elk habitat and immediately adjacent to yearlong pronghorn habitat to the east and winter deer habitat to the west, but contains no key/critical habitats for these species. There are no sage grouse leks or seasonal use areas. Operations commencing during the period of May 15 to July 31 would be subject to the Ely District policy management actions for the conservation of migratory birds.

Environmental Consequences

Proposed Action

Wildlife activity would be disrupted by noise, vehicular traffic, drilling operations, and the loss of as much as 3.2 acres of vegetation during the 2 to 3 months per year of mining and screening operations. Periodic disruptions and the loss of vegetation would last for the life of the mine. Once mine operations are completed, disruptions would cease and reclamation would restore vegetation to the entire project area.

No Action Alternative

Under the no action alternative, the previously stripped 1.6 acre mine area would remain largely unproductive for many years. Impacts associated with the new disturbance for the process site and access road improvements, as described above, would not occur.

Livestock Grazing

Affected Environment

The project area is located within the Wilson Creek Allotment. This use area is grazed seasonally by cattle.

Environmental Consequences

Proposed Action

There would be a loss of as much as 3.2 acres of vegetation during the life of the mine and reclamation period. It is estimated by the rangeland management specialist having administrative responsibility for the area that there would be a loss of less than 1 AUM of forage as a result of the project activities. There are no anticipated conflicts between rangeland resources and the proposed action. However, because the range is generally unfenced, cattle could be encountered on the Mt. Wilson Road. Vehicle/cattle collisions are not generally common but with the increased traffic involving heavy equipment and trucks, the possibility of a

collision involving cattle would increase.

No Action Alternative

Under the no action alternative, the previously stripped 1.6 acre mine area would remain largely unproductive for many years. Impacts associated with the new disturbance for the process site and access road improvements, as described above, would not occur.

Air Quality

Affected Environment

Periodic degradation of air quality occurs due to winds blowing dust from nearby areas, dust generated by vehicular traffic, and occasional regional air pollution.

Environmental Consequences

Proposed Action

There would be a localized increase of dust levels as a result of mining, crushing, screening, and hauling operations. Wind blown dust from these exposed areas could cause a temporary degradation in air quality. Nevada State Air Quality standards would apply to this operation, and the operator would obtain a permit from the NDEP Division of Air Quality. Following reclamation of the site and successful revegetation, the local air quality would return to pre-operation conditions.

No Action Alternative

Under the no action alternative, impacts as described above would not occur.

IV. CUMULATIVE IMPACTS

According to the BLM handbook Guidelines for Accessing and Documenting Cumulative Impacts (1994), the analysis can be focused on those issues and resource values identified during scoping that are of major importance. The issue and resource value of major importance or public concern which will be analyzed for cumulative impacts is impacts to Socio-Economic resources.

Cumulative impacts result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative impacts could result from individually minor, but collectively significant actions, taking place over a period of time (Council on Environmental Quality, Regulations for Implementation of NEPA, 1508.7).

Cumulative impacts of this project would include mining and other ground disturbing projects along the western flank of the Wilson Creek Range, south of Parsnip Peak, and employment

opportunities for residents of the town of Pioche and vicinity for the life of the project – as much as 10 years.

Past Actions

Pioche was founded as a mining camp and flourished for nearly a century as one of Nevada's largest silver-lead-zinc-gold mining districts until the late 1950's. Perlite deposits were discovered in the Wilson Creek Range in the late 1940' where the Hollinger perlite deposit produced about 250,000 tons of perlite from a resource of 4 million tons until its shutdown in 1971. Disturbance from the perlite operations roughly totals about 20 acres.

Present Actions

No other mining operations are active in this portion of the Wilson Creek Range. Only a small pozzolan mine and test work on the old Castleton Tailings provide limited employment in the mining sector for a few residents of the Pioche area. The local economy is mainly supported by agriculture and tourism.

Reasonably Foreseeable Future Actions

Several perlite resources and areas of high and moderate perlite potential have been identified both outside and inside of the western portion of the Parsnip Peak Wilderness Study Area by the US Geological Survey. Successful operation of this proposed new perlite mine may stimulate interest in mining some of these other perlite deposits. In particular, should the old Hollinger mine area be dropped from Wilderness consideration, then mining may resume in that area.

The USGS study also determined that there was a low potential for metals and energy resources. It is unlikely that any commodities, other than perlite, would be mined.

Impacts - Proposed Action

The proposed action would add an additional 1.6 acres of disturbance from perlite operations during its mine life. There would be short term impacts to visual resources, air quality, wildlife, wild horses and burros, and livestock due to loss of vegetation. Once reclaimed, the impacts to this1.6 acres plus the previously stripped 1.6 acres would no longer exist. Long term impacts on the 3.2 acres would provide grasses and shrubs.

The mine operation would provide additional employment opportunities for residents of the Pioche area and revenues for a private company. Economic benefits would spin-off to other local businesses including subcontractors and the railroad facilities in Caliente.

Impacts - No Action Alternative

The no action alternative would not cumulatively impact environmental resources or economic opportunities.

V. PROPOSED MITIGATING MEASURES

The preventative measures and procedures of the proposed action and the attached Recommended Operating Procedures for Exploration and Mining Activities in the Ely District (Attachment 2) are adequate to mitigate adverse effects to the human environment. No additional mitigating measures are proposed as a result of the impact analysis.

VI. SUGGESTED MONITORING

The monitoring measures included in the proposed action are sufficient to ensure mitigation of the potential impacts described above. No additional monitoring measures are proposed as a result of the impact analysis.

VII. CONSULTATION AND COORDINATION

Intensity of Public Interest and Record of Contacts

There is general public interest in this type of potential development. The proposed action was discussed during the Tribal Coordination Meeting on March 18, 2003. Notification of the Initial Planning was posted on the Ely Field Office BLM Internet site on November 18, 2003 (http://www.nv.blm.gov/ely/nepa/ea_list.htm) to solicit public participation in the EA. Notification of this preliminary EA is being sent to:

Lincoln County Commission
Committee for the High Desert
Great Basin Mine Watch
Friends of Nevada Wilderness
Nevada State Clearinghouse
Nevada Department of Wildlife

Record of Internal District Review

Karen Prentice	Invasive, Non-Native Species; Riparian/Wetlands
Shirley Johnson	Range
Jared Redington	Wild Horses and Burros
NathanThomas	Cultural Resources
Jack Tribble	Visual Resource/Wilderness
Jeff Brower	Water Quality/Floodplains
Lynn Bjorklund	Reclamation
Bill Smith	Wildlife, Migratory Birds, Special Status Plants, Special Status Animals Riparian/Wetlands
Elvis Wall	Native American Consultation
Jake Rajala	Environmental Coordinator
Scott Archer, NSTC	Air Quality
Bill Dunn	Fire Management

Attachment 1

RECOMMENDED OPERATING PROCEDURES

For

EXPLORATION/MINING ACTIVITIES IN THE ELY DISTRICT

December 2002

1. Any change or amendment to the notice/plan must be brought to the attention of the District Manager or an authorized representative prior to implementation of the change on the ground. Change to a notice must be provided at least 15 days in advance of its implementation. Change to a plan may require a minimum 30-day environmental review process**.**

2. To provide for effective rehabilitation of the disturbed area, all available growth medium, as practical, will be removed and stockpiled.

3. Topsoil reclamation priorities in areas of limited topsoil availability will generally be heap leach pads, tops and slopes of waste dumps, roads and miscellaneous facilities, and pit bottoms and ramps.

4. Topsoil stockpiles and road berms, if scheduled to be left in place over the growing season, will be seeded with an approved site specific interim seed mix to reduce erosion, preserve the biological flora and fauna, and prevent establishment of cheatgrass and undesirable species.

5. At the earliest feasible time the operator shall reclaim the disturbed area by recontouring to conform with pre-existing topography (including filling of trenches), to the extent possible, followed by redistribution of stockpiled topsoil over the reclaimed area.

6. Reseeding may be required in which case a site-specific seed mixture will be recommended. Seeding is recommended only between October 1 and March 15 for the northern part of the District, and November 1 through March 1 for the southern part of the District.

7. All drill holes must per plugged per Nevada State statute (Division of Water Resources "Regulations for Water Well and Related Drilling") as wavered. If artesian flow is encountered, the drill hole must be plugged immediately. The location, depth, and relative flow rate of any water intercepted shall be reported to the District Manager or an authorized representative. Drill cuttings will be raked out to a depth no greater than one inch.

8. All tailings, dumps and deleterious materials or substances shall be properly disposed. Measures must be taken to isolate, control, and properly dispose of toxic materials.

9. All trash, garbage, debris and foreign matter must be removed and properly disposed. Site must be maintained and left in a clean condition.

10. Existing access must be used whenever possible.

11. All survey monuments, claim markers, witness corners, reference monuments, bearing trees, etc., must be protected against destruction, obliteration or damage. When operations are concluded, the operator will remove all survey markers, stakes, flagging, etc., for which the operator has no further need.

12. When cultural resources, including but not limited to historic or prehistoric artifacts, scatters, structures, or non-architectural features, are discovered, they will be left intact and immediately brought to the attention of the District Manager or an authorized representative. It is the responsibility of the operator to ensure against the removal and/or destruction of historic and/or prehistoric remains on public lands.

13. When paleontological resources, of potential scientific interest are encountered, including all vertebrate fossils and deposits of petrified wood, they will be left intact and immediately brought to the attention of the District Manager or an authorized representative.

14. Water from stock-water reservoirs, springs, and wells must not be used for operations unless prior approval has been granted by the State Engineer and individual or agency with the water rights.

15. The operator shall make every effort to prevent, control or suppress any fire in the operating area. Reports of uncontrolled fires will be relayed immediately to the District Manager or an authorized representative. The BLM Fire Dispatch telephone number is (775) 289-1925. After working hours call 911 or the Sheriff's office at (775) 289-8801.

16. All vegetative clearing will be held to the minimum necessary to accommodate the planned operation. Partial delimbing is preferable to destruction of an entire tree.

17. Under no circumstances shall wild horses, burrows, wildlife or livestock be willfully harassed. When traveling roads, all livestock gates will be closed after use.

18. To protect wildlife and wild horses, barbed wire fences shall be flagged with white flagging at least one inch wide and with at least twelve inches hanging free form the top wire of the fence.

19. If the project involves heavy or sustained traffic, road signs for safety and protection of wild horses and wildlife will be required.

20. The District Manager or an authorized representative will be notified within 5 days of completion of reclamation work so that timely compliance inspections can be completed.

21. To reduce vehicular transport of seeds, working vehicular equipment will be washed down prior to accessing the work area. The wash down will concentrate on the

undercarriage, with special emphasis on axles, frame, cross members, motor mounts, and on and underneath steps, running boards, and front bumper/brush guard assemblies.

22. The operator must comply with all stipulation attached to the BLM's written approval of the project.

Attachment 2

Interim Seed Mix for Salt Desert Shrub Regions

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Species	Seeds/Lb	Seed rate lbs/ac	Seeds/sq ft
Agropyron sibericum (Siberian wheatgrass)	170,000	3.0	11
Elymus cinerus (Magnar Great Basin Wildrye)	95,000	5.0	11
Oryzopsis hymenoides (Indian ricegrass)	141,000	4.0	12
Bouteloua gracilis (Blue grama)	825,000	0.5	9
Secale cereale (Cereal rye)	18,000	10	4
Triticum aestivum (Wheat)	14,000	10	3
Total		32.5 lbs/ac	50 seeds/sq ft.

Seeds should be planted between October 1 and March 15.
Substitutions can be made depending on seed price and availability. Contact the BLM if substitutions are required.

* Seed rate - Adjust listed pounds/acre for pure live seed.

$$\text{Pure Live Seed pounds/acre} = \frac{\text{Seed rate (listed above lbs/acre)}}{(\%\text{germination})\ (\%\text{purity})}$$

Attachment 3

Recommended Seed List for Wilkin Perlite Mine

*

Species	Seeds/Lb	Seed rate lbs/ac	Seeds/sq ft
Agropyron cristatum x desertorum (Hycrest Crested Wheatgrass)	225,000	1.0	5
Lolium perenne (Perennial ryegrass)	227,000	3.0	15
Sitanion hystrix (Squirrel tail)	192,000	2.0	9
Oryzopsis hymenoides (Indian ricegrass)	141,000	2.0	6
Bouteloua gracilis (Blue grama)	825,000	1.0	19
Poa sandbergii (Sandberg's bluegrass)	925,000	0.5	10
Atriplex canescens (Four wing saltbrush)	52,000	0.5	0.5
Atriplex confertifolia (Shadscale)	64,900	0.5	0.5
Total		10.5 lbs/ac	65 seeds/sq ft.

Seeds should be planted between October 1 and March 15.
Substitutions can be made depending on seed price and availability. Contact the BLM if substitutions are required.

* Seed rate - Adjust listed pounds/acre for pure live seed.

$$\text{Pure Live Seed pounds/acre} = \frac{\text{Seed rate (listed above lbs/acre)}}{(\%\text{germination})\ (\%\text{purity})}$$

Attachment 4 Nevada Noxious Weed List

NEVADA NOXIOUS WEED LIST		
Common Name	***Latin Name***	**Other Name(s)**
Austrian fieldcress	*Rorippa austriaca*	Swaisonpea
Austrian peaweed	*Sphaerophysa salsula*	
Black henbane	*Hyoscyamus niger*	
Camelthorn	*Alhagi pseudalhagi*	*A. camelorum*
Canada thistle	*Cirsium arvense*	
Carolina Horsenettle	*Solanum carolinense*	
Common crupina	*Crupina vulgaris*	
Common St. Johnswort	*Hypercium perforatum*	Goatweed; Klamath weed
Dalmation toadflax	*Linaria genistifolia ssp. dalmatica*	
Diffuse knapweed	*Centaurea diffusa*	
Dyer's woad	*Isatis tinctoria*	
Hoary cress	*Cardaria draba*	whitetop
Houndstongue	*Cynoglossum officinale*	
Iberian starthistle	*Centaurea iberica*	
Johnsongrass	*Sorghum halepense*	Perennial sorghum
Leafy spurge	*Euphorbia esula*	
Mediterranean sage	*Salvia aethiopis*	
Medusahead	*Taeniatherum caput-medusae*	Medusahead rye
Musk thistle	*Carduus nutans*	
Perennial pepperweed	*Lepidium latifolium*	Tall whitetop
Perennial sowthistle	*Sonchus arvensis*	
Poison Hemlock	*Conium maculatum*	

NEVADA NOXIOUS WEED LIST		
Common Name	***Latin Name***	**Other Name(s)**
Puncturevine	*Tribulus terrestris*	
Purple loosestrife	*Lythrum salicaria*	Purple lythrum
Purple starthistle	*Centaurea calcitrapa*	
Rush skeletonweed	*Chondrilla juncea*	
Russian knapweed	*Centaurea repens*	
Saltcedar	*Tamarix ramosissima*	Tamarisk
Scotch thistle	*Onapordum acanthium*	
Silverleaf nightshade	*Solanum elaeagnifolium*	White horsenettle
Spotted knapweed	*Centaurea maculosa*	
Squarrose knapweed	*Centaurea virgata ssp. squarrosa*	
Sulfer cinquefoil	*Potentilla recta*	
Yellow starthistle	*Centaurea solstitialis*	
Yellow toadflax	*Linaria vulgaris*	butter and eggs
Waterhemlock	*Cicuta ssp.*	
Western waterhemlock	*Cicuta douglasii*	
Wild licorice	*Glycyrrhiza lepidota*	American licorice

Attachment 5

RISK ASSESSMENT FOR NOXIOUS WEEDS

On 11-18-03 a Noxious Weed Risk Assessment was completed for Jim Wilkin Trucking's Plan of Operation for the Wilson Creek Perlite Mine located in Lake Valley, Lincoln County, Nevada, T03N, R68E, Sec. 17. The project involves approximately 3.2 acres which were partially surveyed for noxious weed occurrence. The proposed surface disturbance consists of widening about 1,600 feet of existing road, constructing a 1.1 acre crushing/screening process area, and mining a previously stripped 1.6 acre mine site. Operations would occur intermittently over several years. The noxious wee inventory was consulted and a site visit was conducted. No noxious weeds occur on the project location. Dalmatian toadflax and spotted knapweed occur on the shoulders of the county access roads.

Factor 1 assesses the likelihood of noxious weed species spreading to the project area.

For this project, the factor rates as low (3) at the present time. No noxious weeds were found on site during pre-site inspections of March 21 and April 4, 2003. Dalmation Toadflax, Bull Thistle, and Spotted Knapweed have been previously inventoried in the region.

Factor 2 assesses the consequences of noxious weed establishment in the project area.

For this project, the factor rates as low (3). This means that as many as 3.2 acres could be disturbed by this project. No noxious weeds were observed in within the 1.6 acre mine area that was previously stripped 30 to 40 years ago.

The Risk Rating is obtained by multiplying Factor 1 by Factor 2.

For this project, the Risk Rating is low (9). Vehicles and equipment would be washed prior to entering the site. Reclamation, which would commence upon completion of operations, would include re-establishment of topsoil cover and re-seeding. The area would be monitored for noxious weeds yearly during operations and for 2 years after completion of reclamation.

Reviewed by: Signed _____

Noxious Weed Coordinator

Date